

Louisiana State Uniform Construction Code Council
Energy Conservation Notes

U. S. Dept. Of Energy Website – www.energycodes.gov – Res and Com Check

R-Value is the reciprocal of the U-Value
Higher the R-Value the better
Lower the U-Value the better

R-Value – Resistance Factor – The ability of the material to resist heat flow for a given temperature difference. **The higher the number the better**

U-Value – Conductance Factor – The ability of the system to transmit heat flow for a given temperature difference. **The lower the number the better**

Solar Heat Gain Coefficient (SHGC) – The fraction of heat generating wavelengths (infrared) of solar energy the glazing material will transmit. **The lower the number the better**

See Table N1102.1

Louisiana is located in climate zones 2 and 3. Zone 2 is in the southern part of the state. The table is prescriptive but Rescheck will allow for some tradeoffs.

R-Values from the Table

	<u>Zone 2</u>	<u>Zone 3</u>
Ceilings	R-30	R-30
Walls	R-13	R-13
Floors	R-13	R-19
Crawl Space	0	R-5 (Continuous) or R-13 (Cavity).
Blown Insulation – 2.2 Lb. = R-4/Inch		
8” To 10” Batt Insulation = R-30		
	<u>Zone 2</u>	<u>Zone 3</u>
U-Factor	0.75	0.65
SHGC	0.40	0.40

HVAC Seer Rating Minimum 13

General Requirements:

1. Some Exceptions
 - Historic Buildings
 - Unheated and Unconditioned Spaces
2. Mixed occupancies must meet each separate code
3. Less stringent for sunrooms w/<40% glazing
4. Caulk, foam or insulation at areas subject to infiltration air from conditioned space to unconditioned space
5. Air tight recessed light fixtures or box around (Use IC fixtures to prevent insulation voids.)
6. U-factor and solar heat gain coefficient most important for windows
7. Joints – IRC M1601.3.1 thru M1601.3.6 for sealing of duct systems
8. Air Handlers – Joints are required to be sealed the same as ducts
9. System calculations are required by the code
10. An insulation system certificate of compliance is required to be placed in or near the electrical panel. The certificate can be printed from Rescheck when compliance is shown
11. Act 335 of the 2007 regular session of the Louisiana legislature amended Act 12 of the 2005 first extraordinary session. 1730.28(a) (3) (e) provides, “Part-IV Energy Conservation of the latest edition of the International Residential Code is hereby amended to require that supply and return ducts be insulated to a minimum of R-6.”

Revised 11/27/2007